



AD9888 Analog Interface for Flat Panel Displays Supports Resolutions to UXGA

The AD9888 provides superior performance for UXGA and SXGA displays



INTEGRATED ANALOG INTERFACE FOR HIGH-RESOLUTION FLAT PANEL DISPLAYS

The AD9888 is a complete 8-bit, 205 MSPS analog interface optimized for capturing RGB graphics signals from personal computers and workstations. Its 205 MSPS encode rate capability and 500 MHz full-power bandwidth support display resolutions up to UXGA (1600 x 1200 at 75 Hz) and all HDTV formats.

The AD9888 fully integrates triple 8-bit/205 MSPS ADCs, on-chip PLL to generate a pixel clock from HSYNC and COAST, mid-scale clamping, and programmable gain, offset, and clamp controls. The AD9888 has the performance, features, and functionality to enable high-resolution display system designers to achieve the best possible image quality.

FEATURES

- 205 MSPS maximum conversion rate supports resolutions to UXGA (1600 x 1200 at 75 Hz refresh)
- Programmable 500 MHz full-power analog bandwidth can be optimized for selected resolution
- Integrated triple 8-bit 205 MSPS ADCs and pixel clock generator
- Pixel clock frequencies range from 10 MHz to 205 MHz
- PLL jitter is less than 500 pS p-p typical at UXGA 60Hz
- Programmable clamp control
- Mid-scale clamping for HDTV and digital TV (YUV signals)
- Integrated sync processing for composite sync and sync-on-green applications
- Sync detect for "hot plugging"



PRODUCT SPECIFICATIONS

General

205 MSPS maximum conversion-rate

128-lead MQFP package

0°C to 70°C operating temperature range

Three-state CMOS outputs operate from 2.5 V to 3.3 V

Power

Low power: Less than 1W for UXGA

3.3 V power supply

Image Quality

Programmable 500 MHz analog bandwidth

Less than 500 pS p-p PLL clock jitter at UXGA 60 Hz

Internal sync processing for composite sync and sync-on-green applications

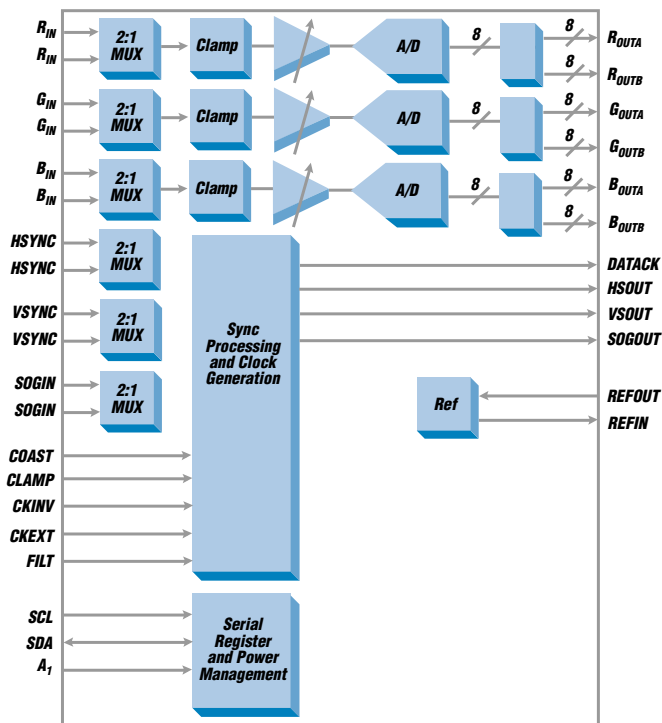
Ease of Use

On-chip PLL generates pixel clock from HSYNC inputs

Fully programmable via 2-wire serial interface

High level of integration saves board space and reduces system cost

User-friendly evaluation board available



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